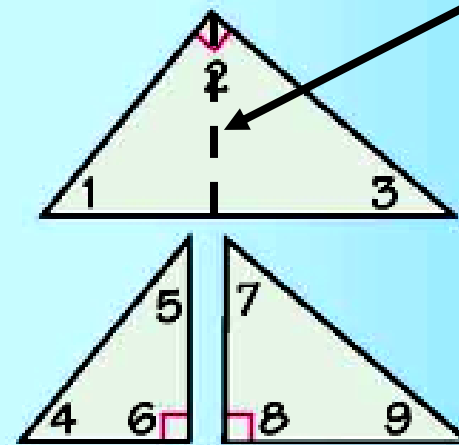


## Hands-On Activity: Similarity in Right Triangles

- Draw one diagonal on a rectangular sheet of paper. Cut the paper on the diagonal to make two congruent right triangles.
- In one of the triangles, use paper folding to locate the altitude to the hypotenuse. Cut the triangle along the altitude to make two smaller right triangles.
- Label the angles of the three triangles as shown.
- Compare the angles of the three triangles by placing the angles on top of one another.



Altitude

1. Which angles have the same measure as  $\angle 1$ ?
2. Which angles have the same measure as  $\angle 2$ ?
3. Which angles have the same measure as  $\angle 3$ ?
4. Based on your results, what is true about the three triangles?
5. Use the diagram at the right to complete the similarity statement.

$$\triangle RST \sim \triangle \underline{\quad ? \quad} \sim \triangle \underline{\quad ? \quad}$$

